



# UNITED STATES PATENT AND TRADEMARK OFFICE

CL  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,872	07/03/2003	Shin-En Chen	4459-0143P	4159
2292	7590	11/19/2003	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				DALAKIS, MICHAEL
ART UNIT		PAPER NUMBER		
		2851		

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,872	<b>Applicant(s)</b> CHEN ET AL.
	<b>Examiner</b> Michael Dalakis	<b>Art Unit</b> 2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 July 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 6-8, 10 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Edlinger et al. (US Patent No. 5,868,482). With regard to claim 1 and its dependent claims, Edlinger discloses a color wheel device including a motor 2 having a housing set to a side of the central axis of the motor body and a motor body (see Figure 2a), color filter(s) 17 set on the housing of the motor (figure 2a), a fixing element 24 (shown as a fixing plate in Figure 2a) on which motor 2 is fixed, the fixing element 24 having an outwardly extending holder (the end of element 24) and an optical element 3 jointed with the holder. The fixing element 24 and the holder are integrally formed. The device of Edlinger also includes a cap 21 set on the color filter

With regard to claim 7 and its dependent claims, Edlinger discloses a color wheel device including a motor 2 having a housing set to a side of the central axis of the motor body and a motor body (see Figure 2a), color filter(s) 17 set on the housing of the motor (figure 2a), a fixing element 24 (shown as a fixing plate in figure 2a) on which the motor body is fixed (figure 2a), an auxiliary fixing element (portion of 24 extending circumferentially beyond the contact with the

motor body as shown in figure 2a), the auxiliary fixing element having an outwardly extending holder (the end of element 24) and an optical element 3 jointed with the holder. The auxiliary fixing element and the holder are integrally formed. The device of Edlinger also includes a cap 21 set on the cap filter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 9 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlinger et al. Edlinger discloses all that is claimed except for explicitly disclosing that the fixing element or the auxiliary fixing element is jointed with the holder and the means recited in the claimed invention of joining the aforementioned fixing elements to the holder. With regard to claims 3 and 9, separating combined elements is an obvious modification and the Applicant has not disclosed any advantage of separate or integral holder and fixing elements. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to structure the holder as separate from the fixing or auxiliary fixing element and having joined to them instead of having the fixing or auxiliary fixing means integrally structured with the holder for the purpose of providing a modular structure that offers more flexibility to the overall structure after manufacture and assembly.

With regard to claims 12-16, the Applicant has recited well-known means of joining structural elements including solder bonding, adhering, riveting and screwing. The Applicant has not disclosed any advantage of joining the fixing elements to the holder via any particular well-known method. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to join the fixing or auxiliary fixing element to the holder via any well-known means including solder bonding, adhering, riveting and screwing to provide a broad range of desirable alternatives for attaching the fixing or auxiliary elements to the holder.

5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlinger et al. in view of Peterson et al. (US Patent No. 6,185,047). Edlinger discloses all that is claimed except for the optical element being a light integration rod. Peterson discloses an image projection system including a color wheel assembly 120 and a light integration rod 122. The integration rod 122 is mounted on the fixing plate that is coupled to the motor of the color wheel assembly 120 (see Figure 2D). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the optical sensor of Edlinger with the integration rod 122 of Peterson and positioning the integration rod in the vicinity of the color wheel for the purpose of minimizing the effect of the shadow created by the motor through the illumination system.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Dalakis whose telephone number is 703.305.4021. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.872.9317.

MD  
November 12, 2003

